

**Work Order ID 70907**

Friday, June 17, 2011 7:38:23 AM



Page 1

Item ID: D3016-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Seat Frame Assembly

Start Date: 6/16/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/23/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date: 11-de-17

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

D3016

RevA / DEO A-1

100

Weld per dwg A/R 4130 rod Batch: M118875 0.00

Large Fab

Large Fab

Memo

0.00

Large Fab

1-Cut all tubes as per Dwg D3016

2-Deburr

3-Assemble tubes, fittings and weld as per Dwg D3016 using welding jig DT8597

4-Transfer drill holes from D3017-041 and D3021-041 in seat frame D3016-041

5- Assemble brackets and gusset per dwg and weld

Q 11-11-17 M

110

QC9- Inspect visual per QSI004- Fusion Welds 0.00



QC

Memo

0.00

Quality Control

1 0 DE11-11-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 70907

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Page 2

Item ID: D3016-041

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Setup Start



Revision ID:

Stop



Item Name: Seat Frame Assembly

Start Date: 6/16/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/23/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

130

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

Install paint screws on fitting ends

START TIME: 2:30

OVEN TEMPERATURE: 320 OF

FINISH TIME: 3:00

140

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1X Ø m-f 6/14/17

1 BX 11-11-17

W118484

W/O:		WORK ORDER CHANGES					
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**Work Order ID 70907**

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Page 3

Item ID: D3016-041

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Setup Start



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Item Name: Seat Frame Assembly

Start Date: 6/16/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/23/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

150

Identify as per dwg &amp; Stock Location:

GA

0.00



Packaging

Memo

70586

0.00

Packaging

EP 11/11/18 @

160

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/11/21 @

11/11/18  
a

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

**Part No:** \_\_\_\_\_ **PAR #:** \_\_\_\_\_ **Fault Category:** \_\_\_\_\_ **NCR: Yes No** **DQA:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Resolution:** \_\_\_\_\_ **Disposition:** \_\_\_\_\_ **QA: N/C Closed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

Friday, June 17, 2011 7:38:30 AM

Page 1

Work Order ID: 70907

Parent Item: D3016-041

Parent Item Name: Seat Frame Assembly





Start Date: 6/16/2011

Required Date: 6/23/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP A 01.09.19 New issue EC IPP RevB: as per revB DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M4130NT0.750W.049 		Purchased	No			100	f	52.0000	4.3	4.526316			
4130 RD Tube .750 x.049W													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MAT033		52							
				117973		52				4.52		11-11-14	
M4130NT0.500W.049 		Purchased	No			100	f	45.4400	4.3	4.526316			
4130 RD Tube .500 x.049W													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MAT032		45.44							
				110740		45.44				4.52		11-11-14	
M4130NT1.000W.120 		Purchased	No			100	f	74.0000	1.5	1.578947			
4130 RD Tube 1.00 x .120wall													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MAT033		74							
				117656		25							
				117973		49				1.57		11-11-17	
D3016-17 		Manufactured	No			100	Each	0.0000	2	2			
Gusset													

70872 x2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

Friday, June 17, 2011 7:38:30 AM

Work Order ID: 70907



Parent Item: D3016-041



Parent Item Name: Seat Frame Assembly

Start Date: 6/16/2011

Required Date: 6/23/2011

Start Qty: 1.00

Required Qty: 1.00

D3016-13 Manufactured No

100 Each

10.0000

2

2



Bracket



EL

11-11-17

~~73541~~

Location

Loc Qty

Loc Code

WA

10

70015

10

D3016-15 Manufactured No

100 Each

2.0000

2

2



Gusset



EL

11-11-17

73541 x 2

Location

Loc Qty

Loc Code

WA019

2

68735

2

D3020-1 Manufactured No

100 Each

1.0000

4

4



Fitting



EL

11-11-17

Location

Loc Qty

Loc Code

WA

1

36713

1

70873

x

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3016	REV. A SHEET 1 OF 3
DATE 01.05.18		TITLE SEAT FRAME ASSEMBLY	SCALE NTS
A	01.05.18	NEW ISSUE	

QTY	PART NUMBER	DESCRIPTION	MATERIAL
X	D3016-041	SEAT FRAME ASSEMBLY	N/A
1	D3016-1	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
2	D3016-3	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
1	D3016-5	TUBE	AISI 4130N TUBE, Ø0.50 DIA x 0.049 WALL (M4130N-T0500W049)
2	D3016-7	TUBE	AISI 4130N TUBE, Ø0.50 DIA x 0.049 WALL (M4130N-T0500W049)
1	D3016-9	SADDLE	AISI 4130N TUBE, Ø1.00 DIA x 0.120 WALL (M4130N-T1000W120)
1	D3016-11	SADDLE	AISI 4130N TUBE, Ø1.00 DIA x 0.120 WALL (M4130N-T1000W120)
1	D3016-13	BRACKET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
1	D3016-15	GUSSET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
1	D3016-17	GUSSET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
2	D3020-1	FITTING	N/A

#### NOTES

- 1) WELD PER DART QSI 004
- 2) ON SHEET METAL PARTS, BREAK ALL UNMARKED CORNERS 0.020-0.040
- 3) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY  
RETURN TO  
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UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 70907

*pl 11-06-17*

DEO ATTACHED

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01.05.30 *#*

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

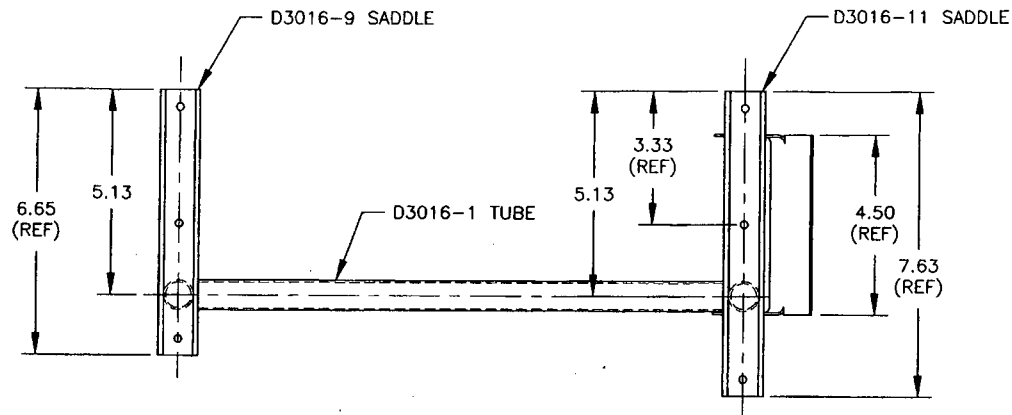
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

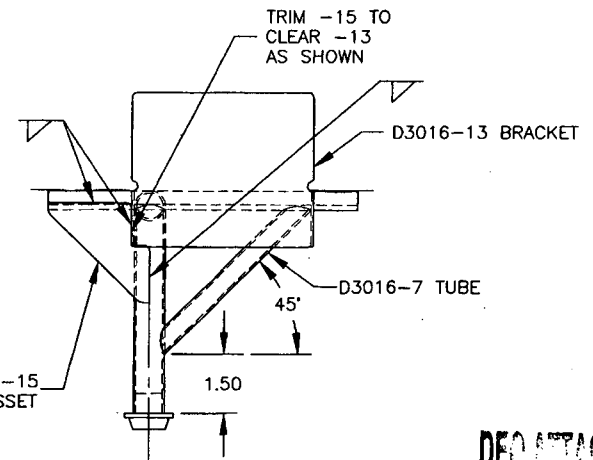
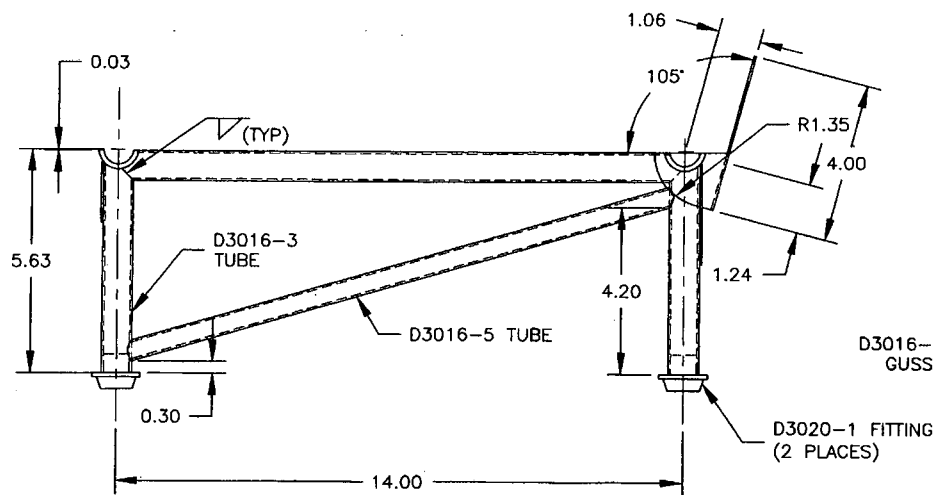
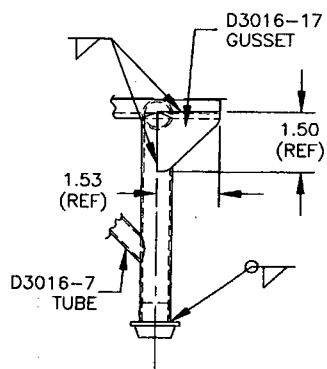
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# D3016-041 SEAT FRAME ASSEMBLY



w/076907



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RELEASED  
01.05.30

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DESIGN CP	DRAWN BY CP	<b>DART</b>	DART AEROSPACE LTD. HAMPSHIRE, ONTARIO, CANADA
CHECKED #	APPROVED #	DRAWING NO. D3016	REV. A SHEET 2 OF 3
DATE 01.05.18		TITLE SEAT FRAME ASSEMBLY	SCALE 1:3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

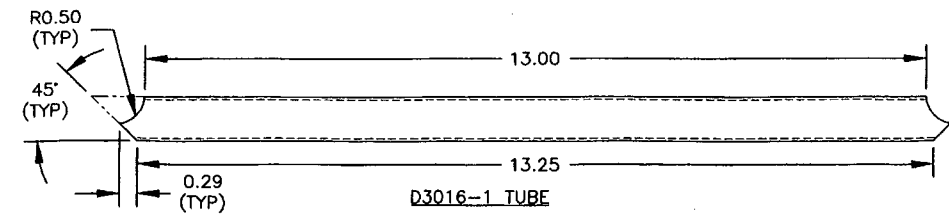
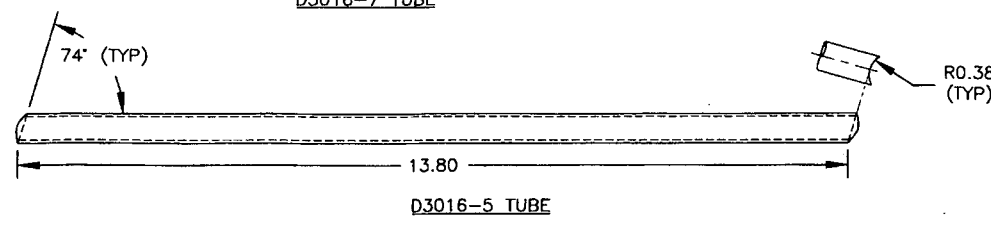
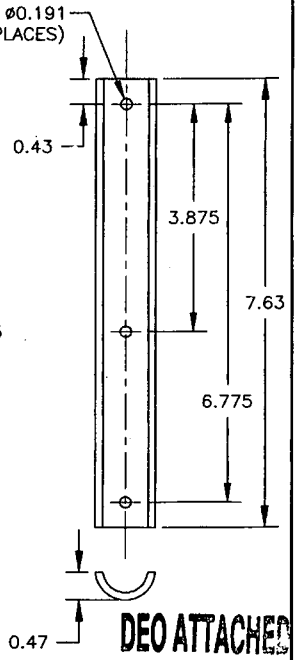
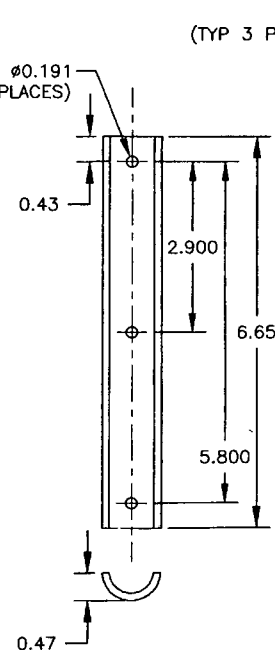
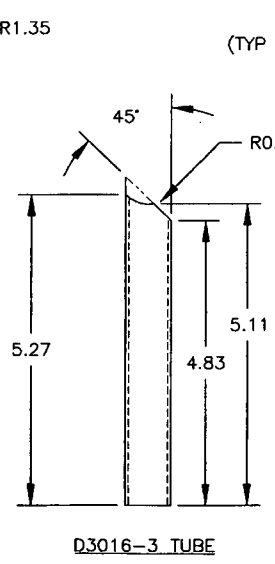
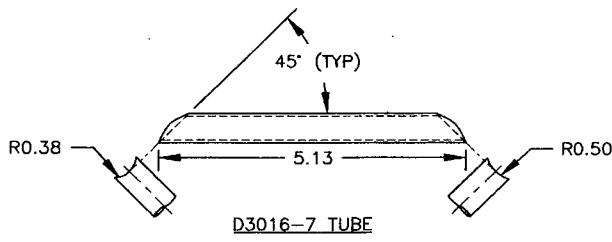
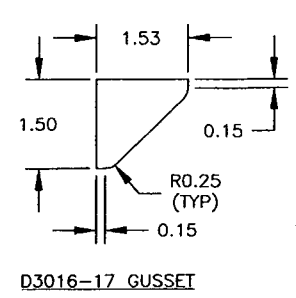
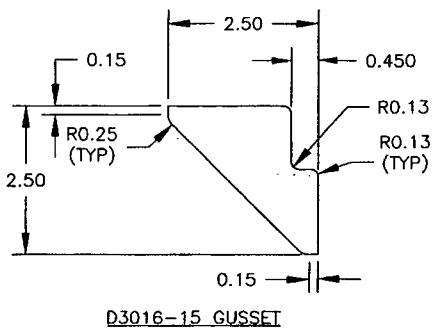
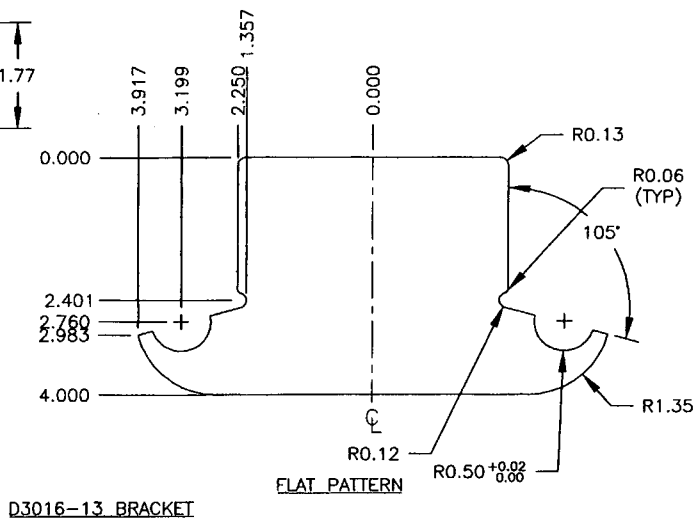
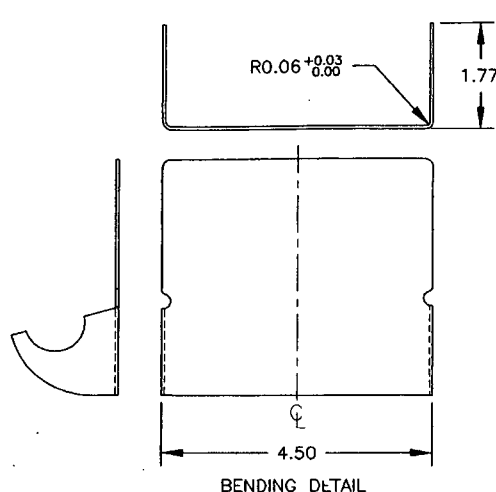
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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1020967



DEO ATTACHED  
RELEASED  
01.05.30

COPYRIGHT © 2001 BY DART AEROSPACE LTD.		DESIGN	CP	DRAWN BY	CP	<b>DART</b>	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA	REV. A
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED	✱	APPROVED	✱			
		DATE	01.05.18			DRAWING NO.	D3016	SHEET 3 OF 3
						TITLE	SEAT FRAME ASSEMBLY	SCALE
								1:2

**Dart Aerospace Ltd**

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DRAWING NO. D3016	TITLE SEAT FRAME ASSEMBLY	REV. A	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3016-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>1</i>	CHECKED <i>UP</i>	MFG. APPR. <i>RE</i>	APPROVED <i>WAP</i>		DE APPR. <i>W</i>		
DATE 10.01.29	DATE 10.01.29	DATE 10.01.29	DATE 10.01.29		DATE 10.01.29		

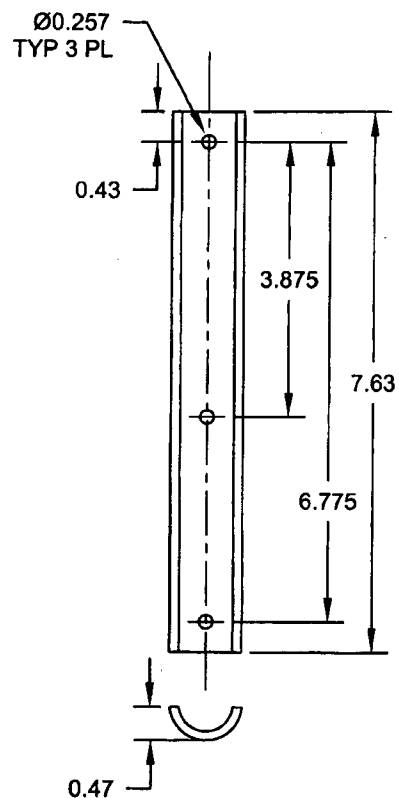
**PURPOSE:**

TO REVISE D3016-11 SADDLE'S HOLE SIZES

**CHANGE:**

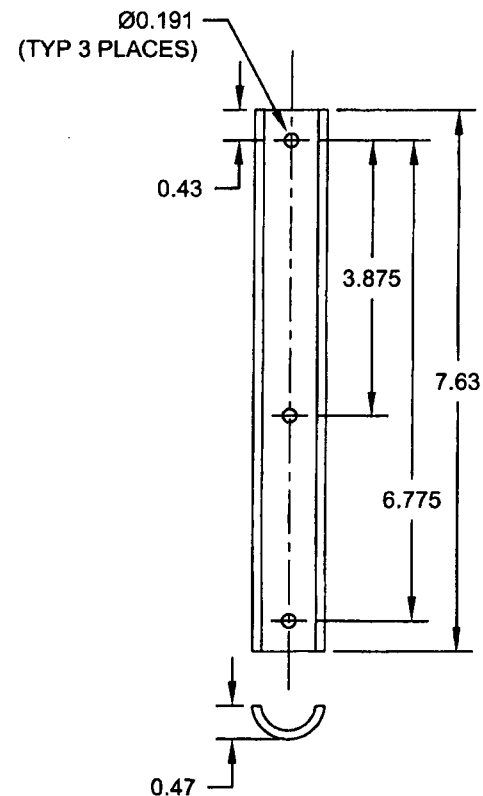
DETAIL D3016-11 SADDLE (SHEET 3): Ø0.257 TYP 3 PL WAS Ø0.191 (TYP 3 PLACES) AS SHOWN:

**IS:**



**D3016-11 SADDLE**

**WAS:**



**D3016-11 SADDLE**

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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